

# SPECIAL PROVISIONS FOR CONFORMITY WITH AND COORDINATION OF THE CONTRACT DOCUMENTS

Johnson County IM-080-6(355)239--13-52

Effective Date July 31, 2018

THE STANDARD SPECIFICATIONS, SERIES 2015, ARE AMENDED BY THE FOLLOWING MODIFICATIONS AND ADDITIONS. THESE ARE SPECIAL PROVISIONS AND THEY SHALL PREVAIL OVER THOSE PUBLISHED IN THE STANDARD SPECIFICATIONS.

## 150402.01 DIGITAL CONTRACT FILES.

**A.** Digital Contract Files for Design 420 are listed in Appendix A. All links and references contained in the listed files are Digital Contract Files.

Commentary: The digital files can be viewed by selecting "52080355\_420\_iM.i.dgn" with Bentley View software. Refer to Attachment B, Bentley Quick Startup for download and use instructions as well as software capabilities. Bentley ProStructures and Bentley Navigator CONNECT are two for purchase programs which the contractor may elect to purchase. Refer to Appendix B for specific capabilities and estimated costs of ProStructures and Navigator CONNECT. Please note that Bentley Navigator CONNECT will not be available until after July 31, 2018. The "52080355\_420\_iM.imodel" file listed in Appendix A will be provided after Bentley Navigator CONNECT is available. The Bentley Navigator CONNECT program has similar capabilities to Bentley View with the addition of tablet viewing.

- **B.** The Digital Contract Files are available for download at the following web site for the project listed above: http://www.iowadot.gov/contracts/lettings.html.
- **C.** After July 31, 2018, 3D files for Design 120 & 320 will be provided "For Information Only" to the awarded bidder. These files are not considered Digital Contract Files.

#### 150402.02 STANDARD SPECIFICATION REVISIONS.

Make the following changes to the Standard Specifications:

## 1101.03, DEFINITION OF TERMS.

Add to the definition of Contract (Also Contract Documents):

Digital Contract Files specified in the contract documents,

## 1105.04, A.

## Replace the Article:

In case of a discrepancy between contents of the contract documents, the following items listed by descending order shall prevail:

- 1. Addendum
- 2. Proposal Form
- 3. Special Provision
- 4. Plans.
- 5. Digital Contract Files
- 5 6. Standard Bridge Plans, Standard Culvert Plans, and Standard Road Plans
- 67. Developmental Specifications
- 7 8. Supplemental Specifications
- 8 9. General Supplemental Specifications
- 9 10. Standard Specifications
- **10 11.** Materials I.M.
- 11 12. Notice to Bidders

## 1105.04, E.

## Replace the Article:

The Contractor shall not take advantage of any apparent error, omission, or discrepancy in the contract documents. The Engineer will be permitted to make such correction in interpretation as may be deemed necessary for the fulfillment of the intent of the contract documents subject to compensation as provided in Articles 1109.03, 1109.04 and 1109.14. Written notice of changes in the contract documents will be given to the Contractor by the Engineer. Field adjustment of digital contract files, if necessary, will be completed by the Engineer.

## 150402.03 DIGITAL CONTRACT FILE USES.

**A.** Table 1 lists the level of development (LOD) of bridge components within the Digital Contract Files. Level of development definitions.

# **LOD Levels**

LOD 100 - The Model Element may be graphically represented in the Model with a symbol or other generic representation, but does not satisfy the requirements for LOD 200. Information related to the Model Element can be derived from other Model Elements.

- LOD 200 The Model Element is graphically represented within the Model as a generic system, object, or assembly with or without approximate quantities, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.
- LOD 300 The Model Element is graphically represented within the Model as a specific system, object or assembly in terms of quantity, size, shape, location, and orientation. Non-graphic information may also be attached to the Model Element.
- LOD 350 The Model Element is graphically represented within the Model as a specific system, object, or assembly in terms of quantity, size, shape, location, orientation, and interfaces with other structural systems. Non-graphic information may also be attached to the Model
- LOD 400 The Model Element is graphically represented within the Model as a specific system, object or assembly in terms of size, shape, location, quantity, and orientation with detailing, fabrication, assembly, and installation information. Non-graphic information may also be attached to the Model Element.

Table 1: Level of Development				
Component	LOD 100	LOD 200	LOD 300	LOD 350
Bridge deck concrete and rebar				Х
Bridge Barrier rail concrete and rebar				Х
Barrier rail conduit		Χ		
Barrier rail cover plates				Х
Disc bearing assemblies		Х		
Expansion joints		Х		
Abutment concrete and rebar				Х
Abutment piles				Х
Abutment aesthetic treatments		Х		
Abutment backfill		Х		
Abutment slope protection		Х		
Pier concrete and rebar				Х
Pier piles				Х
Pier aesthetic treatments		Х		
Girders				Х
Crossframes and stiffeners			Х	
Girder shear connectors			Х	
Inspection cable system and attachments		Х		
Inspection access door and attachments		Х		
Deck drains		Х		

- **B.** In addition to the above level of development of the Digital Contract Files, additional notes pertaining to the Digital Contract Files are listed below.
  - All dimensions shown in the element information are measured in a horizontal plane and do not account for grade.
  - Girders do not incorporate camber or deflections.

- Construction joints and keyways are not included.
- Barrier conduit is shown chorded. Actual layout shall follow barrier rail geometry. Junction box locations and conduit expansion fittings are included for visual information only.
- Concrete deck haunch above the girder top flange and below the deck is for information only. See plan details for haunch height and width.
- Girder end cuts are shown as plumb. End cuts shall be 90 degrees to the flanges.
- Field splices are positioned plumb relative to girder end cuts. Field splices shall be positioned relative to 90 degree end cuts.
- Crossframe stiffeners, crossframes and intermediate stiffeners are oriented plumb. They shall be oriented perpendicular to the flanges.
- Bearing and jacking stiffeners are oriented correctly as plumb.
- Bolts length and thread length are for visual information only.
- Bolt holes in girder web and flanges are not shown.
- Welds and weld treatments are not shown.
- Caulking not shown.
- Flange plate thickness and width transitions are not shown.
- Steel member copes not shown.
- Inspection cable is shown for visual information only.
- Limits of macadam stone, engineering fabric, geotextile fabric, excavation limits, floodable backfill and porous backfill are not included.
- Subdrain included for visual reference only.
- Construction joints are not included.
- Existing and phased ground surfaces are provided for visual reference only.
- Utility ribbons are provided for visual reference only.
- Boring locations are shown for visual reference only.
- Approach slabs are not included in the model.

#### 150402.04 SOFTWARE.

The Digital Contract Files were developed and details verified with the software shown below.

- Bentley ProStructures: version 08.11.14.341
- Bentley OpenBridge Modeler: 08.11.11.72

## 150402.05 METHOD OF MEASUREMENT AND BASIS OF PAYMENT.

All costs for complying with this special provision shall be considered incidental to Mobilization. No separate payment will be made.